DOCUMENT RESUME

ED 191 154 EA 012 893

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TITLE Assessing and Analyzing Needs. Systematic Planning Series for Local Education Agencies. Monograph Number 2.
INSTITUTION Alabama State Department of Education, Montgomery. Office of Planning and Evaluation.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
PUB DATE Nov 77
NOTE 22p.: For related documents, see EA 012 891-898.

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Educational Assessment: *Educational Needs: Educational Planning: Elementary Secondary Education: *Needs Assessment

ABSTRACT

The primary purpose of educational needs assessment should be to determine the specific nature of learner needs in order that programs may be designed and instruction prescribed that will meet those needs. Needs assessment should be conducted only when the information is necessary and will be used. Before a needs assessment is undertaken, it should be determined why it is being done, what should be assessed, how the information will be obtained, who will use the assessment results, how the information will be interpreted, and what kinds of decisions will be based on the results of the assessment. The needs assessment process involves seven basic steps: (1) deciding who will provide information: (2) deciding what information to collect: (3) developing procedures for collecting the information: (4) collecting the information: (5) processing and analyzing the information: (6) designating needs based on analysis of the information: and (7) informing the community and decision-makers of the results. (Author/PGD)

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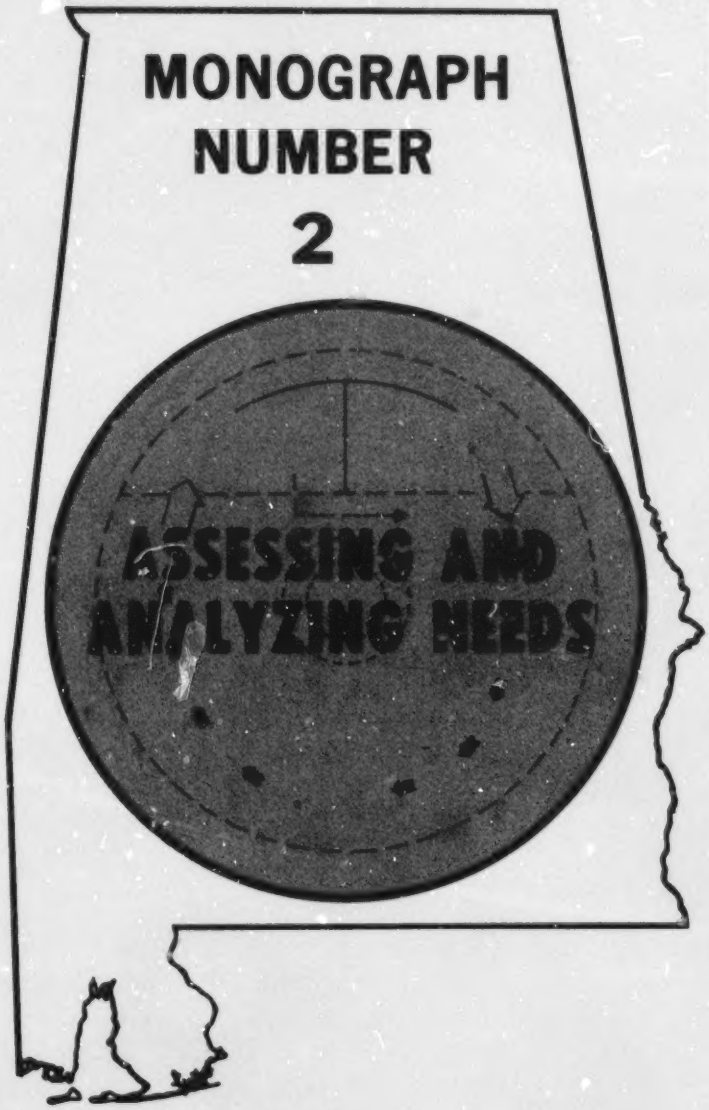

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NOVEMBER, 1977

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SYSTEMATIC PLANNING SERIES
FOR LOCAL EDUCATION AGENCIES

MONOGRAPH NUMBER 2

ASSESSING AND ANALYZING NEEDS

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AUG 7 1980

The authors are grateful to Dr. John Walden, Head of the Department of Administration and Supervision, School of Education, Auburn University, Auburn, Alabama, for his assistance in writing this monograph.

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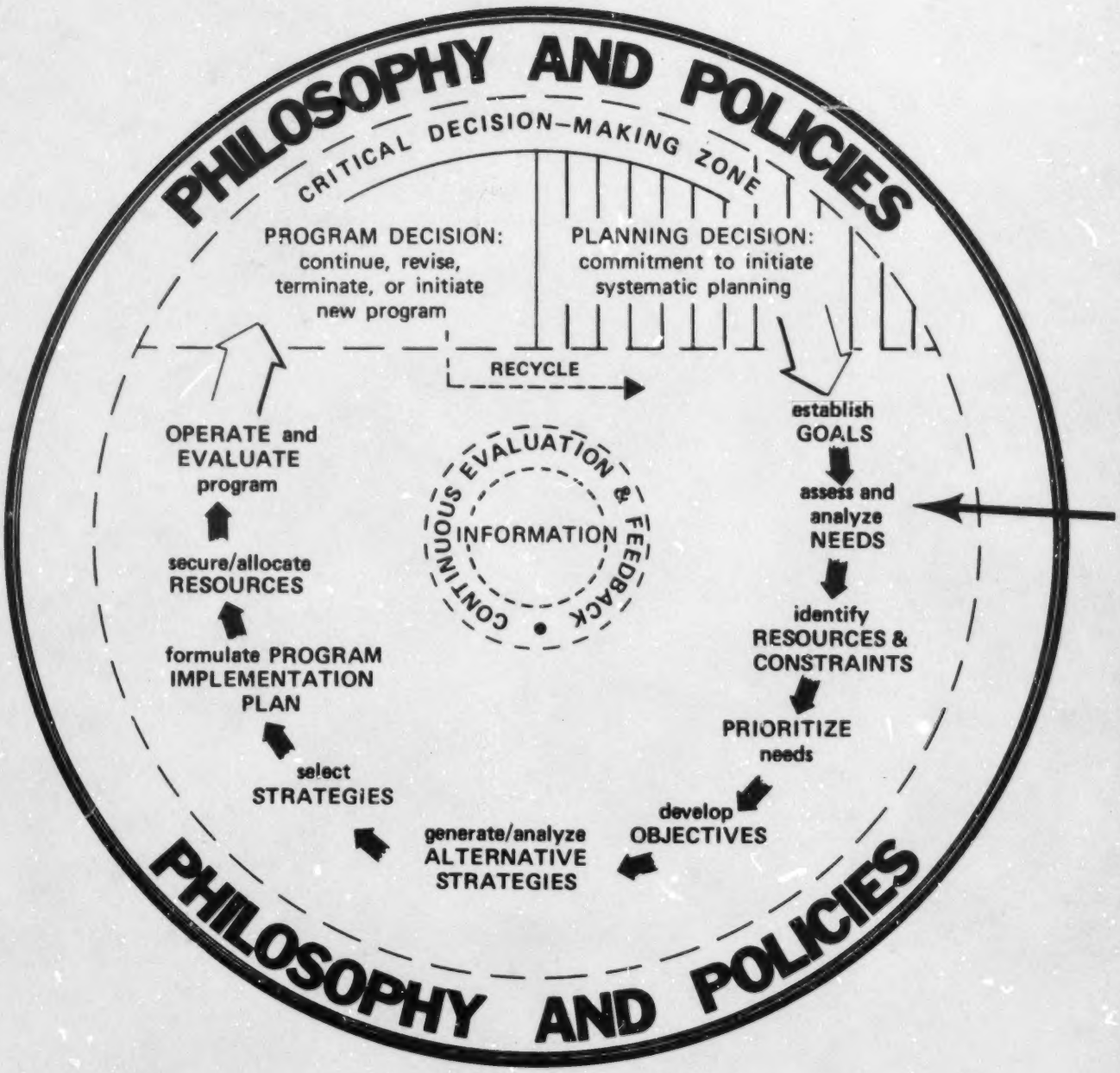

A PLANNING CYCLE

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ASSESSING AND ANALYZING NEEDS

An educational need may be perceived as the discrepancy between desired conditions and existing conditions. It is a lack of something required; a shortage or deficit. One of the most widely accepted and easily understood definitions of a need is stated succinctly as the difference between "what should be" and "what is." A need is more than a whim or a fad. It is not a "want", wish, or desire. Neither is it a goal or a solution. A need is the identified, documented, measurable discrepancy between "what should be" and "what is."

Needs Assessment is the process employed in determining the gap between "what should be" and "what is." Depending upon the purpose, needs assessment requires the use of certain information derived from the collection and analysis of hard data and/or perceptual data. Subsequent sections of this monograph will provide a clearer understanding of how appropriate data can be obtained and utilized to identify, document, and analyze the difference between "what should be" and "what is."

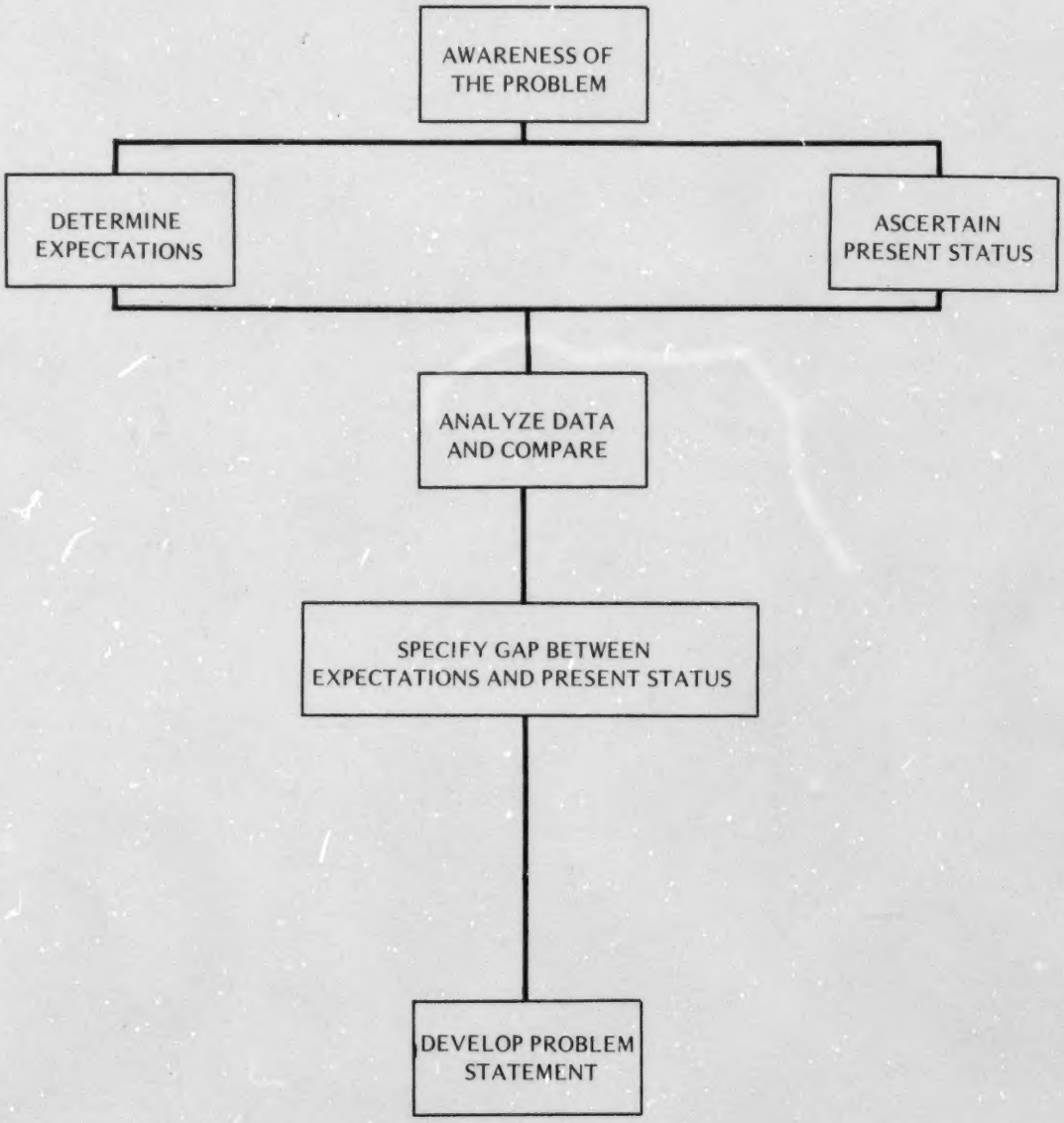
Based upon the definitions given above, the concepts in needs assessment and educational need may be depicted as follows:

DESIRED CONDITION	Minus	EXISTING CONDITION	Equals	DISCREPANCY

WHAT SHOULD BE	–	WHAT IS	=	NEED

Some people may feel more comfortable if the gap between future expectations ("what should be") and present status ("what is") is referred to as a **problem** rather than a **need**. This suggests an approach to needs assessment which may be more in keeping with the way problem solving really begins in practice. Even though people may be unaware of following specific steps in the early stages of problem solving, they often do.

The illustration below typifies the way a person usually "thinks through" a problem prior to taking action.



Unfortunately, educators usually do not get all of the available facts before making decisions based upon what they think the needs are or what they perceive the problem to be. A problem statement should not be formulated hastily without a careful study of sufficient information which enables determination of "where we want to go" and "where we are" and permit a valid comparison of these two components. Failure to base decisions upon adequate information often leads to false assumptions and reliance upon limited and/or erroneous perceptions. Furthermore, a needs assessment which is poorly planned and improperly conducted can result in unintentionally misleading people, making supposedly "official" statements of "apparent" needs, when considering only symtoms.

The initial phase of the planning cycle, as emphasized in monograph number one, is the establishment of goals which reflect people's perceptions and aspirations and constitute the "what should be" of the needs assessment. "What is" is based upon perceptual data or hard data or both. Below is a simple example of how the comparison between "what should be" and "what is" might be made to produce a statement of need.

What should be	What is	Need
The sixth grade students in the _____School System should be reading at or above the national average.	Results of a recent standardized reading achievement test revealed that the sixth grade students were reading, on an average, 8 months below the national average.	There is a need to increase the average reading achievement level of sixth grade students by 8 months.

Note that the statement of need does not suggest how the students' reading achievement will be raised to the desired level, but it does identify a documented need which requires more study and possibly further planning and action. There should be no attempt to propose solutions at this point. (This step while essential, will be done at the proper time.)

The preceding process is dependent upon clearly stated goals and adequate, reliable, and appropriate information. When making the comparison between "what should be" and "what is," it is important to keep in mind that: (1) the more specific the "what should be," the greater the chance of attaining the goals, (2) the better the information (both factual and perceptual), the more likelihood of documenting the need, and (3) the more accurate and descriptive the need statement, the greater the possibility that something will be done to satisfy the need.

The primary purpose of needs assessment should be to determine the specific nature of learner needs in order that programs may be designed and instruction prescribed which will meet these needs. Although the assessing of educational needs should be learner-oriented, (focusing on the needs of students in the cognitive, affective and psychomotor domains) it is important to keep in mind that institutional needs must be considered also. If needs are to be valid, realistic, and acceptable they must emanate from the verified deficiencies of those children, youth, and adults whom the schools serve. Before educational programs are planned or implemented to remove any deficiencies (learner, institutions, or both) the broad, general goal statements ("where we should be") must be translated into more meaningful terms. These statements of specific, measurable outcomes are objectives which provide the basis for appropriate program development. (Monograph number four is devoted to developing objectives.)

Needs assessment does not consists of merely "counting" (students, teachers, books, desks, etc.) nor is it just a "testing" program. "Counting" invariably places a disproportionate amount of attention on quantity at the expense of quality, whereas traditional "testing" results in the questionable practice of ranking students and/or schools. Needs assessment should go beyond these narrow, unimaginative, inadequate concepts if we are to determine strengths and weaknesses with reasonable accuracy and then proceed to plan for needed change in a logical, productive, systematic manner. Needs assessment and the subsequent phases in the planning process are greatly dependent upon both the quality and quantity of information.

Needs assessment efforts should and do vary greatly in their purpose, design, and scope. An appropriate assessment program should be developed after consideration of numerous factors such as purpose, needs, capabilities, conditions, objectives and numerous other significant local variables. Certainly good ideas, techniques, and understandings may be gained from studying needs assessments in other situations. There are numerous published needs assessment models and instruments available which may be adapted, but in all probability each school or school system must develop, design, and adopt its own needs assessment program based upon unique local requirements and circumstances.

Needs assessment may be carried out on a small scale for a specific purpose (e.g. system-wide in-service education or curriculum adequacy in a particular school), or it may be very comprehensive (e.g. a system-wide assessment of the total educational enterprise). Whatever its scope and purpose, it is imperative that the needs assessment be designed to fit a particular situation and not be an inappropriate replication of someone else's program. Although there are many different types of needs assessments, it is important to remember that each is a tool for improved educational decision making within a specific framework or setting.

Before initiating an assessment program, one should make the following basic assumptions:

1. Important information that is not available elsewhere can be obtained from a needs assessment.

2. The information gathered can and will be used to improve educational decision making.

These assumptions imply commitment which is essential to the success of any needs assessment. Those initiating needs assessment must recognize that the information is needed, wanted, and will be used, and they must be willing and able to provide the support required to assure success. It is better not to conduct a needs assessment than to do so when the information is either not needed, unwanted, or will remain unused. Understandably, educators sometimes have serious misgivings about and exhibit reticence or reluctance to the idea of becoming involved in a formal needs assessment effort. At times it may be advisable to begin on a small scale and limit needs assessment to a few well-chosen, vital educational concerns for which information is most needed. A successful small-scale needs assessment is preferable to a large scale flop.

A number of important questions should be considered prior to initiating a needs assessment. Some of these are:

What is the purpose? (Why is it being done?)

What should be assessed? (Student performance in cognitive, affective or psychomotor domain? Teacher performance? Curriculum adequacy? etc.)

What information will be required? (Achievement test results? Demographic data? School climate? etc.)

Who will provide the information? (Students? Teachers? Parents? etc.)

How will the information be obtained? (Records? Questionnaires? Various other instruments? etc.)

Who will use the assessment results? (Board of Education? Superintendent? Teachers? Community? etc.)

How will the information be interpreted? (Statistical analyses? Displayed in charts and tables. Explained in narrative form? etc.)

What kinds of educational decisions will be made as a result of assessment? (How will the results be used? Will it really make a difference? Will provisions be made to take the "next step" in planning? etc.)

When a decision is made to conduct a needs assessment, sufficient funds should be allocated, adequate staff time should be provided, and lines of communication and responsibility should be clearly established. Someone in the organization should be charged with the specific responsibility of coordinating the needs assessment effort. This person and key members of the assessment team should be selected very carefully because the assessment effort will succeed or fail in direct relation to the quality of the people who are assigned this important responsibility. Those involved in the assessment program should possess the capability and receive the support necessary to get the job done.

"Establishing goals" is depicted in the planning cycle as a separate phase **preceding** the "needs assessment" component. This is fully justified and appropriate as a beginning point in the planning process when plans for a needs assessment have not been developed. On the other hand, if a needs assessment has been planned, the goal establishment phase becomes the first step in the needs assessment process. Obviously, establishing goals can be combined quite logically with the other information gathering processes because it is natural to compare future aspirations (expressed in the goal statements) with existing conditions (determined from the data collected in the needs assessment). Thus goal setting and information gathering may, for all practical purposes, be handled concurrently. If done in this manner, however, it is advisable not to complete the information gathering process **before** establishing goals because the goals then tend to be restricted too much by the data and become extremely problem-oriented and narrow in scope.

It should come as no surprise that interested people, when afforded an opportunity to "think big" (no constraints or inhibiting "ground rules") during the goal setting process, tend to express themselves in terms of their hopes and desires for a better tomorrow. However, these well-intentioned people often have little knowledge of actual conditions and base their statements of "what should be" upon their own values, opinions, priorities and experiences, limited information, or in some cases erroneous information and/or impressions. A process of goal setting which provides for wide involvement and allows this degree of freedom is both desirable and risky. Educators can avoid difficulties later in the planning process if they are aware of the dangers, understand the usual nature of the initial goal statements, accept the fact that goals derived in this manner represent **perceptions of needed change, and realize that at this** stage goals tend to be highly idealistic. Those responsible for the needs assessment must remember that the original goals proposed and their order of priority (if an attempt is

made to rank order them in terms of importance) should be considered tentative until they are checked against the factual information collected in the needs assessment. In other words, provisions should be made to verify goals and make needed revisions in them after additional information is available.

Following the determination of educational goals (which has been presented as the initial phase of the planning cycle), it is possible to move into the needs assessment process, keeping in mind that in order to identify needs we must compare "what should be" with "what is." If goals were not established earlier to provide the "what should be," the needs assessment, which furnishes data for determining the "what is" would be of little value. Likewise, an attempt to implement programs to accomplish goals would be futile without an assessment to provide dependable data about "what is."

Although opinions (perceptions) and achievement test scores constitute the most frequently used sources of data on "what is," examples of numerous other important data sources which should be considered will be included under the suggestions below.

Suggestions for Conducting Needs Assessment

The process of needs assessment includes at least the following basic steps or dimensions:

1. Deciding from whom information will be collected
2. Deciding what information to collect
3. Developing procedures to collect it
4. Collecting the information
5. Processing and analyzing the information
6. Analyzing the needs
7. Presenting the information to the community and decision makers in usable form

An explanation of each of these steps will provide a clearer understanding of many of the factors to be considered in needs assessment.

1. **From whom will information be collected?** The decision as to who will provide input into the needs assessment is generally a local matter. The following, although certainly not an exhaustive listing, are possible groups from whom information may be expected. The inclusion of various groups will be determined to a great extent by the comprehensiveness and purpose of the needs assessment.

   a. Parents
   b. Students
   c. Educators
   d. Business and professional people
   e. Others interested in the schools such as elected officials, civic club members, etc.
   f. Other lay citizens

The advisability of involving people throughout the entire planning process cannot be over emphasized. This is of critical importance. The needs assessment process should provide for input from all pertinent aspects of the educational program, involvement of personnel at every level in the system, and representative input and participation from students, parents, and other members of the community. People can and do make the difference in bringing about change and the omission of any group which has an interest in and a direct effect on the teaching - learning situation will cause the needs assessment to be less than complete.

The involvement and support of parents and other members of the community is of utmost importance in that these are the people who must provide financial support for the educational program through tax increases and/or increased appropriations. People who are involved in setting the goals and identifying the needs are likely to be more supportive of the schools. They must be convinced that there are legitimate needs if they are expected to provide the required support. Educational leaders have a responsibility to inform people of the documented educational needs which have been identified by a representative group within the community. They must also call upon the citizens to provide adequate funding to meet the needs and effect well-planned changes designed to improve educational opportunities.

2. **What information to collect? Collecting information that is already available or that** will not be used is a waste of time, money and effort and has been responsible for the early demise of many needs assessments. A system or school must also be careful not to buy poor, unusable, or inadequate information. This is worse than worthless because unreliable information is often misleading and can result in poor decisions and unsound educational practices and programs.

   The base-line data may be of two basic types: (1) hard statistical data, which indicate conditions as they actually exist, and (2) perceptual data, which reflect the opinions of various people relative to what they believe existing conditions are and what they feel future conditions ought to be.

   In the listing which follows no attempt is made to distinguish between perceptual data items as opposed to hard data items.

Examples of base-line data

1. Institutional data
   a. Demographic data
   b. Costs, finance, budget trends, economic conditions
   c. Transiency rates of students, absenteeism, student health data
   d. School climate
   e. Educational and supportive services offered (including personnel, facilities, curriculum, etc.)
2. Student performance
   a. Scores on norm-referenced and/or criterion-referenced tests
   b. Subject grades and/or other indications of student achievement
   c. Teacher observation
3. Community records
   a. Census data and population projections
   b. Planning and land use surveys
   c. Manpower and employment data
   d. Data from county or municipal offices, social service agencies, and courts

4. Curriculum and instruction

   a. Adequacy

   b. Appropriateness

   c. Quality

   d. Diversity

   e. Holding Power

   f. Relevancy

   g. Staffing patterns

   h. Instructional methods

   i. Instructional support

   j. Innovations

5. Facilities

   a. Sufficient space

   b. Adequate equipment

   c. Learning environment

   d. Maintenance and custodial service

   e. Adequacy of Sites

   f. Grounds upkeep

   g. Community use

6. Personnel

   a. Competency

   b. Effectiveness

c. Adequacy of staff

d. Performance

e. Qualifications

f. Education and/or training

g. Professional growth and develop

7. Student achievement and/or performance

a. Job Preparation

b. Success in work or continued education

c. Accomplishments of graduates

d. Admission to post high school

8. Community concerns

a. Vandalism in schools

b. Truancy problems

c. Assumption of civic responsibilities

d. Crime

e. Discipline

f. Resources and use of funds

g. Communications

9. Pupil Personnel Services

a. Guidance and Counseling

b. Health services

c. Transportation

d. Student activities

e. Attendance

f. Testing

g. Academic placement

h. Job placement

Both baseline and perceptual data are important but the exact data needs will be determined by the nature of the needs assessment. Much depends upon the purpose of the assessment. (Will learner needs, institutional needs, or both be determined?) The comprehensiveness or scope (will the assessment involve one school or entire system, will it concentrate on a specific area or encompass the total educational program?) are also influencing factors when considering data requirements. Obviously, the type and amount of information is a local matter, but in any case only the information that can and will be used in planning a more adequate educational program for students should be collected.

3. **Developing information collecting procedures.** Before deciding about collection procedures, the purposes of the needs assessment should be reviewed. A number of questions must be answered at this point; major decisions must be made; and a considerable amount of advance planning must be done.

   The following are but a few examples of the kinds of questions to be decided in this stage:

   a. Will data collections be handled locally by existing staff or will this be contracted? Can it be done locally by adding staff members or re-assignment of duties? Do we have the capabilities needed to collect the data or must we secure consultant assistance?

   b. What instruments will be used? Are appropriate instruments available or will it be necessary to develop our own? Will we use survey forms, opinionaires, educational inventories, interview guides, basic data forms, norm-referenced or criterion-referenced tests?

   c. What domain of learner behavior will be investigated (cognitive, affective, psychomotor)?

   d. Will sampling be used, or will information be collected from all students, parents, teachers, etc.? Will the students involved be of a certain age or in a particular grade?

These and other important questions must be dealt with in a satisfactory manner during the earliest stages of planning for needs assessment. The local school or system, in the process of establishing the nature and extent of the needs assessment effort, should have fairly well determined the procedures for collecting the information. Use of a simple time-line schedule for the completion of major tasks to insure progress toward completion of the needs assessment could prove helpful.

4. **Collecting the information.** Once decisions have been made as to what information will be collected, from whom it will be collected, and procedures for collecting it have been established, the actual collection of information may begin. As explained earlier, the collection of information may be done at the same time that goals are being formulated. Information collection and goal setting can both be time consuming procedures extending over a period of many months in certain comprehensive planning efforts. Thus, it seems sensible to consider pursuing these two activities concurrently. As the information is collected it should, by prior arrangement, be received in specified form by the needs assessment coordinator. Sufficient personnel should be provided and adequate time should be allotted for the accurate collection of the desired information. This requires a realistic approach and carefully planned schedules which consider unanticipated delays and problems. The coordinator should specify in detail who is responsible and how the information will be collected. Since all information to be collected is important and is to be used in planning educational improvements, it should be as complete and reliable as possible regardless of the time required to collect it. However, a schedule which unnecessarily extends the time and appears to be highly inefficient, or the lack of a reasonably sound collection plan can cause frustration, dissatisfaction, discouragement, disillusionment, loss of interest, enthusiasm, and confidence, and can ultimately render the entire needs assessment process ineffective and assure its failure.

5. **Processing and analyzing the information.** Plans for processing and analyzing the information collected should have been developed long before the collection process begins. What is done with the data collected is of critical import. Well-planned, systematic analysis is imperative if the needs assessment effort is to serve its purpose and provide a dependable, useful basis for decision making. A decision to use either manual or computer processing and data analysis will be determined to a great extent by the comprehensiveness of the needs assessment, its purposes, availability of computer time, funding, staff competencies and adequacy, expected use of results, and other local factors. If a sophisticated statistical analysis is required and the school system does not have the expertise or technology to perform this function, an outside person or agency should be utilized. If a comprehensive statistical analysis is anticipated, the services of a competent statistician should be secured during the

initial planning stages. It is essential that this person be involved early in the development of the needs assessment effort.

6. **Analyzing the needs.** A needs assessment would not be complete without a careful analysis of the identified and documented needs. This process is sometimes referred to as problem definition - a delineation of the factors and influences which contribute to the need. It is an orderly method for determining why there is a difference between "what should be" and "what is." This analytical examination of the needs is also known as discrepancy analysis. Some of the contributing factors will have been identified already in the original statement of "what is" as derived from the needs assessment information. The idea here is to analyze the available information and consider other relevant variables to assure that all known factors influencing needs have been considered after determination of what the discrepancy between status and expectation is. A number of key people should be selected to determine as nearly as possible **why** the discrepancy exists. Their combined knowledge, experience, and understanding should be utilized as they incisively explore all possible factors bearing on the need. During this process, the nature of the problem is thoroughly examined in terms of what, where, how much, who, etc. This approach suggests a systematic procedure for determining the cause of the problems and encourages consideration of important, but often overlooked, factors. It also forces people to get at the **problem** not just the **symptoms** as is so often done. Once these additional insights are acquired, it is possible to develop a simple, more easily understood problem statement, thus enhancing the chances that the problem will be resolved.

7. **Presenting the information in usable form.** Adequate dissemination and effective use of the information collected is vital to the success of the needs assessment effort and to all other aspects of the planning process. Decisions cannot and should not be made and subsequent action cannot be taken until the results of needs assessment are provided to the community and to the decision makers. Using the previously proposed definition of a need as the difference between "what should be" and "what is," it is obvious that the decision makers must know and support the educational goals which were established in the goal setting process and must also have an accurate report describing the existing conditions. Using this information, they may then begin to identify and document needs. Later it will be necessary to priortize the needs.

   In disseminating the information, the form and simplicity with which it is presented is very important. Members of the community and many of those who make decisions concerning education are not professional educators and do not understand some of the education jargon; therefore, it is essential that the information be presented in language which is readily understood by laymen. This demands that reports and releases be made concise, simple and relevant. People don't want

double-talk. They want to know the needs based upon facts. They want to know where we are in relation to where we want to be. The community and the decision makers deserve good information that has been analyzed carefully and reported accurately, openly and understandably.

In the collection, analysis, dissemination, and use of information, one should be extremely careful not to mislead people. This may happen unintentionally but with serious consequences unless necessary precautions are taken. This is especially true in respect to test selection and comparison of test results.

Two glaring weaknesses or problems with many needs assessment efforts are:

a. Those involved never really perform a needs assessment at all (End up merely with goal setting and/or ranking or a lot of perceptual information that will not be used.)

b. Very little happens after needs are identified. (Results are filed and locked securely away.)

A quality needs assessment requires firm commitment, careful, systematic planning, flexibility, and a large amount of common sense and hard work, but it can pay large dividends.